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10/645,099	08/21/2003	Jeff Scott Eder	VM-55	7276
53787 ASSET TRUST	7590 03/05/200 C. INC.	EXAMINER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/645,099	EDER, JEFF SCOTT				
Office Action Summary	Examiner	Art Unit				
	Susanna M. Diaz	3692				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period was pailure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE!	I.  lely filed  the mailing date of this communication.  O (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on <u>07 N</u>		<u>2008</u> .				
· <u> </u>	<i>,</i> —					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 400 C.C. 215.					
Disposition of Claims						
<ul> <li>4) Claim(s) 25-40 and 49-62 is/are pending in the 4a) Of the above claim(s) 33-40 is/are withdraw</li> <li>5) Claim(s) is/are allowed.</li> <li>6) Claim(s) 25-32 and 49-62 is/are rejected.</li> <li>7) Claim(s) is/are objected to.</li> <li>8) Claim(s) are subject to restriction and/or</li> </ul>	vn from consideration.					
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	epted or b) objected to by the Eddrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some color None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) X Notice of References Cited (PTO-892)	4) ☐ Interview Summary	(PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 10/17/08.11/6/08.12/14/08.	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ite				

### **DETAILED ACTION**

1. This non-final Office action is responsive to Applicant's election filed November 7, 2008 and supplemental response filed December 14, 2008.

Applicant presents no arguments in support of a traversal to the restriction; therefore, the election is interpreted as a constructive election without traverse and the restriction requirement itself is made final. Applicant has elected Group I. Applicant is correct that the Examiner omitted a discussion of claims 49-62 in the restriction requirement. The Examiner apologizes for this oversight. Claims 49-62 will be grouped with claims 25-32 for now, since they currently depend from claim 25 (please see note below).

Claims 33-40 stand as non-elected.

Claims 25-32 and 49-62 are presented for examination.

2. All previously pending rejections have been withdrawn. New rejections follow.

# Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 25-32 and 49-62 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

A claimed process is eligible for patent protection under 35 U.S.C. § 101

if:

"(1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different See Benson, 409 U.S. at 70 state or thing. ('Transformation and reduction of an article 'to a different state or thing' is the clue to the patentability of a process claim that does not include particular machines.'); Diehr, 450 U.S. at 192 (holding that use of mathematical formula in process 'transforming or reducing an article to a different state or thing' constitutes patent-eligible subject matter); see also Flook, 437 U.S. at 589 n.9 ('An argument can be made [that the Supreme] Court has only recognized a process as within the statutory definition when it either was tied to a particular apparatus or operated to change materials to a 'different state or thing' '); Cochrane v. Deener, 94 U.S. 780, 788 (1876) ('A process is...an act, or a series of acts, performed upon the subject-matter to be transformed and reduced to a different state or thing.').7 A claimed process involving a fundamental principle that uses a particular machine or apparatus would not pre-empt uses of the principle that do not also use the specified machine or apparatus in the manner claimed. And a claimed process that transforms a particular article to a specified different state or thing by applying a fundamental principle would not pre-empt the use of the principle to transform any other article, to transform the same article but in a manner not covered by the claim, or to do anything other than transform the specified article." (In re Bilski, 88 USPQ2d 1385, 1391 (Fed. Cir. 2008))

Also noted in *Bilski* is the statement, "Process claim that recites fundamental principle, and that otherwise fails 'machine-or-transformation' test for whether such claim is drawn to patentable subject matter under 35 U.S.C. §101, is not rendered patent eligible by mere field-of-use limitations; another

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corollary to machine-or-transformation test is that recitation of specific machine or particular transformation of specific article does not transform unpatentable principle into patentable process if recited machine or transformation constitutes mere 'insignificant post-solution activity." (*In re Bilski, 88 USPQ2d 1385, 1385 (Fed. Cir. 2008)*) Examples of insignificant post-solution activity include data gathering and outputting. Furthermore, the machine or transformation must impose meaningful limits on the scope of the method claims in order to pass the machine-or-transformation test. Please refer to the USPTO's "Guidance for Examining Process Claims in view of *In re Bilski*" memorandum dated January 7, 2009,

http://www.uspto.gov/web/offices/pac/dapp/opla/documents/bilski\_guidance\_me\_mo.pdf .

It is also noted that the mere recitation of a machine in the preamble in a manner such that the machine fails to patentably limit the scope of the claim does not make the claim statutory under 35 U.S.C. § 101, as seen in the Board of Patent Appeals Informative Opinion *Ex parte Langemyr et al.* (Appeal 2008-1495), http://www.uspto.gov/web/offices/dcom/bpai/its/fd081495.pdf.

Obtaining data from system databases is merely insignificant post-solution activity since it amounts to data gathering and outputting. Claims 25-32 are not tied to a particular machine or apparatus nor do they transform a particular article into a different state or thing, thereby failing the machine-or-transformation test; therefore, claims 25-32 are non-statutory under § 101.

Claims 49-62 are directed toward a "computer readable medium having sequences of instructions stored therein, which when executed cause the processor in a computer to perform..." The specification does not mention a medium; however, the specification does refer to software. Dependent claim 62 recites that the medium may be "an intelligent agent." No "agent" is disclosed in the specification; however, the specification does discuss a "bot." Both a bot and intelligent agent may be interpreted as a set of software instructions. A physical storage device is not necessarily required within the metes and bounds of a bot or intelligent agent, thereby rendering claims 49-62 as improperly written and non-statutory computer program product claims since they lack the proper storage device (e.g., when a medium is interpreted as a bot/agent/software instructions *per se*).

Appropriate correction is required.

### Claim Rejections - 35 USC § 112

- 5. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 6. Claim 62 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

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Claim 62 recites that a computer readable medium comprises an intelligent agent. The Examiner has searched the original disclosure for mention of an "agent," but has found no mention thereof. The specification talks about "bots"; however, the scope of a "bot" may be different than the scope of an "intelligent agent." Therefore, by utilizing the phrase "intelligent agent" instead of "bot," for example, the Applicant has improperly brought in new matter since the original specification does not support the scope of an "intelligent agent."

- 7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 8. Claims 25-32 and 49-62 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 25 recites the limitation, "obtaining data representative of an organization from a plurality of organization system databases in a format suitable for processing where the organization has one or more enterprises." At present, it is not clear if the phrase "where the organization has one or more enterprises" further modifies the description of the type of organization from which data is obtained or if it further limits which type of organizations the database format must be suitable for processing.

Claim 25 recites "transforming at least a portion of the data into a model that identifies and outputs a tangible net contribution of one or more elements of value to an organization value by a category of value, one or more lists of

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changes that will optimize one or more aspects of organization financial performance and a plurality of tools for organization financial management selected from the group consisting of one or more category of value models, one or more component of value models, one or more market value models, one or more network models, one or more optimization models, a plurality of segmentation models, a plurality of simulation models, one or more value chain models, a plurality of management reports, a system for automated trading of an organization equity security based on a market sentiment." It is not clear what the metes and bounds of "at least a portion of the data" are. Does this refer to a subset of the type of data obtained in the first step or does it refer to obtaining a subset of codes/formatting used to represent all obtained data? Does the step of "transforming at least a portion of the data into a model" refer to the creation of the mathematical formula to create a model or are mere relationships among the data established?

Furthermore, it is not clear if the at least a portion of data is meant to be "transformed" into "one or more lists of changes that will optimize one or more aspects of organization financial performance and a plurality of tools for organization financial management." It is not understood how the "one or more lists of changes" and the "plurality of tools" fit into the method. How are they used as part of the "computer-implemented finance method"? If they are part of the transformation step, it is still not clear how the at least a portion of data is transmitted into both a model and one or more lists of changes and a plurality of tools. Furthermore, the phrase "will optimize" refers to future activity that

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appears to occur outside of the current metes and bounds of the claimed invention.

Also, looking toward the Markush grouping that lists the available "plurality of tools for organization financial management," it is not clear is multiple (i.e., plural) tools are selected from one of the available options or if the "plurality" of tools necessarily requires two or more options from the Markush grouping.

Additionally, "a system for automated trading of an organization equity security based on a market sentiment value" seems out of place when compared to the listing of models and reports. Is the "system for automated trading" meant to be part of the Markush grouping in the transforming step of claim 25?

Claim 25 recites, "using the model to analyze the data and output said tangible net contributions selected from the group consisting of real options, market sentiment and combinations thereof." There are various models recited throughout the claim, including the generic recitation of "a model" in the step of transforming as well as the multiple available models listed in the Markush grouping (also in the step of transforming). It is not clear which of these previously recited models is being referred to in the step of using the model.

The step of using also refers to multiple "categories of value." There is no antecedent basis for plural "categories of value." Subsequently, in the step of using, it is recited that "a category of value [is] selected from the group consisting of..." The switch between a single and plural categories of value is confusing.

Claim 25 recites "where one or more lists of changes that will optimize one or more aspects of organization financial performance comprise one or more lists

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of a change to one or more price premiums." Again, the phrase "that will optimize" implies future activity that can be performed outside of the scope of the claimed invention. Therefore, it is not clear how activity associated with the phrase "that will optimize" is meant to limit the metes and bounds of the claim. This is analogous to an issue of intended use, where the intended use does not serve to patentably limit the scope of the claimed invention.

All claims dependent from claim 25 inherit the same rejections under 35 U.S.C. 112, 2<sup>nd</sup> paragraph.

Claim 26 recites "an element of value." It is not clear if "an element of value" refers to the "one or more elements of value" recited in independent claim 25 or if "an element of value" introduces an entirely new value altogether. If it is a new element of value altogether, it is not understood how this new element of value ties into the rest of the claim (which incorporates independent claim 25). If meant to refer to the "one or more elements of value" recited in claim 25, it is not clear if only one of the possible plural elements of value is selected from the Markush grouping introduced in claim 26 or if any to all of the possible plural elements of value may be selected from this Markush grouping.

Claim 27 recites "developing a model that identifies a net contribution of one or more elements of value." It is not clear if "a model" refers to one of the models recited in independent claim 25 or if it introduces an entirely new model. If it is a new model altogether, it is not understood how this model ties into the rest of the claim (which incorporates independent claim 25). If meant to refer to one of the models of claim 25, specific reference should be made to the

previously recited model (e.g., using "the" or "said" and referring to the correct model name verbatim, as set forth in claim 25). It is also unclear if the "net contribution" of claim 27 is the same as the "tangible net contribution" of claim 25. Claim 27 also recites "at least a portion of the data." Again, the scope of "at least a portion of the data" is vague and indefinite because it is not clear if a "portion" refers to the content of the data or a subset of formatting codes. Also ambiguous is to which previously recited data the "at least a portion of the data" refers.

Claim 28 recites "where an aspect of financial performance is selected from the group consisting of..." It is not clear how this aspect of financial performance relates to the rest of the claim (which incorporates independent claim 25). There is no reference to a particular, previously recited aspect of financial performance nor is this aspect of financial performance tied into any actively performed functionality; therefore, it is not understood how this limitation is meant to limit the scope of the claimed invention.

Claim 29 recites "where a contribution of an element of value to a category of value is a net contribution..." Since "a contribution" is recited (instead of "the contribution" or "said contribution"), it is not clear if "a contribution" refers to the "tangible net contribution" of claim 25 or introduces a new contribution altogether. There is no clear reference to a particular, previously recited "net contribution" nor is this "net contribution" tied into any actively performed functionality; therefore, it is not understood how this limitation is meant to limit the scope of the claimed invention.

Claim 30 recites "a model that identifies a net contribution of one or more elements of value." It is not clear how if "a model" refers to one of the models recited in independent claim 25 or if it introduces an entirely new model. If it is a new model altogether, it is not understood how this model ties into the rest of the claim (which incorporates independent claim 25). If meant to refer to one of the models of claim 25, specific reference should be made to the previously recited model (e.g., using "the" or "said" and referring to the correct model name verbatim, as set forth in claim 25). It is also unclear if the "net contribution" of claim 30 is the same as the "tangible net contribution" of claim 25.

Claim 31 recites "an organization system database." Since "an organization system database" is recited (instead of "one of the organization system databases" or "one of said organization system databases," i.e., referencing claim 25), it is not clear if "an organization system database" refers to the one or more organization system databases of claim 25 or introduces a new organization system database altogether. There is no clear reference to a particular, previously recited "organization system database" nor is this "organization system database" tied into any actively performed functionality; therefore, it is not understood how this limitation is meant to limit the scope of the claimed invention.

Claim 32 recites "a model that identifies a tangible net contribution of one or more elements of value." It is not clear if "a model" refers to one of the models recited in independent claim 25 or if introduces an entirely new model. If it is a new model altogether, it is not understood how this model ties into the rest of the

claim (which incorporates independent claim 25). If meant to refer to one of the models of claim 25, specific reference should be made to the previously recited model (e.g., using "the" or "said" and referring to the correct model name verbatim, as set forth in claim 25).

Claims 49-56 make reference to the method of claim 25; however, it is not clear if claims 49-56 are meant to be dependent from claim 25 or not. They would be improper dependent claims since they switch statutory classes without further limiting claim 25. This is due to the fact that one can infringe on claims 49-56 without necessarily infringing claim 25. (A method is infringed by active executive of the steps while a computer program product claim capable of performing the method may be infringed by mere creation or possession of the software product, without necessarily running the software.) This problem is further exacerbated by dependent claim 54, which explicitly recites "wherein completing the method of claim 25 is an optional step."

Claim 49 recites the step of producing "one or more additional useful results." "Useful results" are relative; therefore, the metes and bounds of such a limitation are not clearly defined.

Claim 49 also recites the step of "processing a set of data representative of an organization using one or more predictive models that rely on a set of input data that have been transformed into a different state or thing." By "relying" on data, do the one or more predictive models explicitly incorporate the input data as part of equations/formulas utilized within the models or can the input data merely be used to access other data or derive data that is directly plugged into

the one or more predictive models? Also, it is not understood what is meant by transforming input data into a different state or thing. The manipulation of data *per se* rarely, if ever, rises to the level of a true transformation of data; therefore, such a limitation is vague and indefinite.

All claims dependent from claim 49 inherit the same rejections under 35 U.S.C. 112, 2<sup>nd</sup> paragraph.

Claim 50 recites "two or more independent components of application software"; however, it is not clear whether or not these components refer to the "two or more independent components of application software" recited in independent claim 49.

In claim 51, it is not understood how "a different state or thing comprises a model or a summary." The manipulation of data *per se* rarely, if ever, rises to the level of a true transformation of data; therefore, such a limitation is vague and indefinite. Creating a model or a summary merely manipulates data and does not rise to the level of physically transforming the data into another thing or machine.

Claim 52 recites "an independent component of application software"; however, it is not clear whether or not this independent component refers to the "two or more independent components of application software" recited in independent claim 49.

Claim 53 recites "one or more useful results"; however, it is not clear whether or not these "one or more useful results" refer to the "one or more useful results" recited in independent claim 49.

Claim 54 explicitly recites "wherein completing the method of claim 25 is an optional step." Claim 54 fails to further limit independent claim 49.

Furthermore, claim 54 has no remaining functionality since it effectively negates

Claim 55 refers to a "plurality of data." Is this newly introduced data (within the claim scope) or is it meant to refer to particular data referenced from claim 25 via claim 49?

the ability to perform any functionality recited in claim 49.

Claim 56 recites "two or more independent components of application software"; however, it is not clear whether or not these components refer to the "two or more independent components of application software" recited in independent claim 49.

Claims 57-62 make reference to the method of claim 25; however, it is not clear if claims 57-62 are meant to be dependent from claim 25 or not. They would be improper dependent claims since they switch statutory classes without further limiting claim 25. This is due to the fact that one can infringe on claims 57-62 without necessarily infringing claim 25. (A method is infringed by active executive of the steps while a computer program product claim capable of performing the method may be infringed by mere creation or possession of the software product, without necessarily running the software.) This problem is further exacerbated by dependent claim 58, which explicitly recites that the step of using the integrated database is an "optional step."

All claims dependent from claim 57 inherit the same rejections under 35 U.S.C. 112, 2<sup>nd</sup> paragraph.

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Claim 58 recites that "using the integrated database as a sole source for data that are transformed into a model is an optional step." Claim 58 fails to further limit independent claim 57. Furthermore, claim 58 has no remaining functionality since it effectively negates the ability to perform much of the functionality recited in claim 57.

In claim 59, it is not clear if "a plurality of disparate sources" is meant to refer to the "plurality of disparate sources" recited in independent claim 57 or not.

In claim 61, it is not clear if "a keyword" is meant to refer to the "one or more keywords" recited in claim 60 or not.

In claim 62, it is not clear if "a computer readable medium" is meant to refer to the previously recited occurrences of a/the computer readable medium or not.

Appropriate correction is required.

9. Applicant is put on notice that amendments to the claims (particularly to claims 49-62, since their dependency on claim 25 is unclear at present) could invoke withdrawal of further claims as directed toward a non-elected invention(s).

# Comment Re: Art Rejection

10. Because claims 25-32 and 49-62 are so indefinite, no art rejection is warranted as substantial guesswork would be involved in determining the scope and content of these claims. See *In re Steele*, 305 F.2d 859, 134 USPQ 292

(CCPA 1962); Ex parte Brummer, 12 USPQ 2d, 1653, 1655 (BdPatApp&Int 1989); and also In re Wilson, 424 F.2d 1382, 165 USPQ 494 (CCPA 1970). Prior art pertinent to the disclosed invention is nevertheless cited and Applicant is reminded they must consider all cited art under Rule 111(c) when amending the claims to conform with 35 U.S.C. § 112.

### Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Jensen et al. "The Dynamics of Corporate Dividend Reductions." Financial Management, Vol. 24, No. 4, Page 31, Winter 1995.

12. An examination of this application reveals that applicant is unfamiliar with patent prosecution procedure. While an inventor may prosecute the application, lack of skill in this field usually acts as a liability in affording the maximum protection for the invention disclosed. Applicant is advised to secure the services of a registered patent attorney or agent to prosecute the application, since the value of a patent is largely dependent upon skilled preparation and prosecution. The Office cannot aid in selecting an attorney or agent.

A listing of registered patent attorneys and agents is available on the USPTO Internet web site http://www.uspto.gov in the Site Index under "Attorney and Agent Roster." Applicants may also obtain a list of registered patent attorneys and agents located in their area by writing to the Mail Stop OED,

Director of the U. S. Patent and Trademark Office, PO Box 1450, Alexandria, VA 22313-1450

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susanna M. Diaz whose telephone number is (571) 272-6733. The examiner can normally be reached on Monday-Friday, 8 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Abdi can be reached on (571) 272-6702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Susanna M. Diaz/ Primary Examiner, Art Unit 3692